	· · · · · · · · · · · · · · · · · · ·		I DD	Time at amp
L	Hits	Search Text	DB	Time stamp
Number_	<u> </u>		<u> </u>	
1	1	3899571.pn.	USPAT;	2003/10/30
	İ		US-PGPUB	15:49
_ `	531	carbonate and Bayer and lime and (oxalate	USPAT;	2003/10/28
		or sulphate or sulfate)	US-PGPUB;	17:49
	İ		EPO; JPO;	
			DERWENT;	
	1		IBM TDB	
_	371	(carbonate and Bayer and lime and	USPAT;	2003/10/29
		(oxalate or sulphate or sulfate)) and	US-PGPUB;	16:57
		(alumina or aluminate or aluminum)	EPO; JPO;	- '
		(didnillid of didnillido of didnillida,)	DERWENT;	
		·	IBM TDB	
	7	3120996.pn. 3341286.pn.	USPAT;	2003/10/29
_	/	3120996.pm. 3341206.pm.	US-PGPUB;	16:13
			EPO; JPO;	16.13
			1	
			DERWENT;	
	·	l	IBM_TDB	0000/10/00
7	45	(carbonate and Bayer and lime and	USOCR	2003/10/29
		(oxalate or sulphate or sulfate)) and		16:43
		(alumina or aluminate or aluminum)		1
-	3	"3372985"	USOCR	2003/10/29
				16:43
_	166	(carbonate same lime) and Bayer and	USPAT;	2003/10/29
		(alumina or aluminate or aluminum)	US-PGPUB;	18:07
			EPO; JPO;	
*		•	DERWENT;	
			IBM TDB	
_	3	("2806766"   "2981600"   "4038039").PN.	USPAT	2003/10/29
		,, ,, ,, ,, ,		17:40
_	6	"3134639"	USPAT;	2003/10/29
			US-PGPUB;	18:06
			EPO; JPO;	1
		,	DERWENT;	
i i			IBM .TDB	1
	91	/garbonata game lime) and Bayon and	USOCR	2003/10/29
_	91	(carbonate same lime) and Bayer and	OBOCK	18:07
	1	(alumina or aluminate or aluminum)		10:07

DERWENT-ACC-NO:

1981-96436D

DERWENT-WEEK:

198152

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TITLE:

Recovery of soda and sulphate from

alumina prodn. waste

- includes causticisation of

carbonate-sulphate mixt.

with lime and sepn. of calcium

carbonate

INVENTOR: OVSYANNIKO, V I; STYAZHKIN, A K; TOKAREV, G V

PRIORITY-DATA: 1979SU-2762932 (May 7, 1979)

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES MAIN-IPC

SU 814866 B

March 25, 1981

N/A

003

N/A

INT-CL (IPC): C01D005/00, C01F007/06

ABSTRACTED-PUB-NO: SU 814866B

**BASIC-ABSTRACT:** 

Sodium <u>carbonate and sulphate</u> mixt. obtd. as by-prod. in Bayer's process of

<u>alumina</u> prodn. is processed to recover sodium <u>sulphate</u> and soda by dissolving

the mixt. in water, followed by causticisation with <a href="lime">lime</a>, sepn. of calcium

carbonate by filtration and sepn. of sodium sulphate from the filtrate by

evapn. and salting out.

The purity of the final prod. is increased and the loss of soda is reduced if

Na2S04 is sepd. until molar ratio of <u>carbonate to sulphate</u> in soln. is 0.1-0.5.

The resulting soln. is then concd. to 270-320 g/l Na20 (as caustic soda) after sepn. of the pptd. sodium sulphate. Bul.11/23.3.81. (3pp)

----- KWIC -----

Basic Abstract Text - ABTX (1):

Sodium carbonate and sulphate mixt. obtd. as by-prod. in Bayer's process of alumina prodn. is processed to recover sodium sulphate and soda by dissolving the mixt. in water, followed by causticisation with lime, sepn. of calcium carbonate by filtration and sepn. of sodium sulphate from the filtrate by evapn. and salting out.

Basic Abstract Text - ABTX (2):

The purity of the final prod. is increased and the loss of soda is reduced if Na2S04 is sepd. until molar ratio of <u>carbonate to sulphate</u> in soln. is 0.1-0.5. The resulting soln. is then concd. to 270-320 g/l Na2O (as caustic soda) after sepn. of the pptd. sodium <u>sulphate</u>. Bul.11/23.3.81. (3pp)

Derwent Accession Number - NRAN (1): 1981-96436D

Title - TIX (1):

Recovery of soda and sulphate from alumina prodn. waste - includes causticisation of carbonate-sulphate mixt. with  $\underline{\text{lime}}$  and sepn. of calcium carbonate

Standard Title Terms - TTX (1):

RECOVER SODA SULPHATE ALUMINA PRODUCE WASTE CAUSTIC CARBONATE SULPHATE
MIXTURE LIME SEPARATE CALCIUM CARBONATE